REMARKS

In the final Office Action dated July 13, 2005, claims 1-20 are pending. Claims 1, 6, 17, and 20 are independent claims from which all other claims depend therefrom. Claims 1-2, 6, 17, and 20 are herein amended. Claims 1-2, 6, 17, and 20 have not been amended for patentability reasons.

Claims 1-20 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The Office Action states that the claims contain subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the Response of May 5, 2005, Applicants, respectfully, traversed and submitted that the subject matter presented in all of the claims is clearly contained in the specification of the present application and is presented in such a way as to enable one skilled in the art to which it pertains. The Applicants recited the paragraphs and Figures for which each element of every claim is described.

The current Office Action states that the specification of the present application discusses the parts or technology that comprises the system but fails to disclose enough information as to how the parts or technology are combined to create the system such that any person skilled in the art could carry out the invention with undue experimentation. Applicants submit that the Office Action in using the term enough admittedly implies that at least some information was provided. Applicants submit that the specification as drafted clearly provides more than enough information to enable one skilled in the art to carry out the invention without undue experimentation.

As stated in the previous Response, the specification and accompanying Figures provides a description of each and every element claimed. In addition, Applicants submit that the specification and Figures also provides descriptions

and illustrated examples of how the elements claimed are combined and utilized to form the systems claimed.

For example, claim 1 recites a telecommunication system that includes the following elements, a host site 15, a presenter software interface 62, a presenter server 58, two or more bi-directional adaptors 64, and one or more Internet data adaptors 70. Paragraphs [0018], [0020]-[0024], [0027], [0028], [0029], [0030], [0031], [0033]-[0040], and [0043]-[0047] of the present application and Figures 1-5, provide a description of each of these elements, how they are combined and connected, how they are utilized, and example methods of use. Paragraph [0018] describes the communication signals that are transmitted and received between the elements and the recording, broadcasting, and routing of these signals between a host site and heterogeneous client types. Figures 1-3 illustrate the broadcasting and routing of the communication signals. Paragraphs [0020]-[0024] describes a sample control system, which is part of the telecommunication system 12, that may be utilized at the host site including some of the components thereof and how it operates and heterogenous client types. The description of the control system provides some overall understanding with regards to the presenter software interface 62 and the presenter server 58, which are part of the control system, as stated in paragraph [0027]. An illustrated example of how the presenter software interface 62 and the presenter server 58 are connected, combined, and utilized is shown in Figures 2 and 3. Paragraph [0028] describes the software interface 62 and the viewing screens thereof. Paragraph [0029] states the purpose of the presentation server 58. Paragraph [0030] states how the client adaptors 64 are used and how they function. Figure 3 illustrates how the client adaptors 64 are combined and used in the control system. Paragraph [0031] describes the IDA complex 66, which has the IDAs 70, and is part of the control system. Figure 3 illustrates the incorporation of the IDAs 70 in the control system. Paragraphs [0033]-[0040] and Figure 4 provide an example of

how the stated devices are used to provide remote educational instruction. Paragraphs [0043]-[0047] and Figure 5 provide an example of how communication signals are synchronized and converted between a controller and the heterogeneous client types.

Applicants submit that not only does the specification provide a clear understanding of how the elements are combined and utilized, claim 1 in stating: that the presenter software interface displays communication signals, having an instruction signal corresponding to a teleinstruction class, in a host compatible software language; that the presentation server is separate from the presenter software interface and modifies the communication signals by performing presenter chosen tasks via the presenter software interface; that the bi-directional client adapters convert the communication signals between the host compatible software language and two or more heterogeneous client type compatible software languages; and that the Internet data adapter(s) direct the communication signals between the presenter software interface and the two or more heterogeneous client types via one or more Internet protocols, provides some understanding as to how the elements claimed are combined and utilized. Claim 1 states how the communication signals are displayed, in what language the communication signals are displayed, which device modifies the communication signals, which devices convert the communication signals, and how the communication signals are transferred between devices.

Applicants submit that similar recitation, description, illustration, and disclosure can be found in the specification and the figures for all of the claims.

Thus, the specification openly and undoubtedly provides adequate disclosure to enable one skilled in the art to make and/or use the claimed invention. Referring to MPEP 2164, as long as the specification discloses at least one method for making or using the claimed invention that bears a reasonable correlation to the entire scope of the claim, then the enablement requirement of

35 U.S.C. 112 is satisfied. *In re Fisher*, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970). The present specification provides several examples, and provides the components and systems to perform the displaying, modifying, converting, and transferring of communication signals as claimed.

The test for enablement is whether one reasonably skilled in the art could make or use the invention without undue experimentation, *In re Wands*, 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991). Also, the fact that experimentation may be complex does not necessarily make it undue, if the art typically engages in such experimentation. *In re Certain Limited-Charge Cell Culture Microcarriers*, 221 USPQ 1165, 1174. Applicants submit that the claimed invention may be used in light of the specification without experimentation. Regardless of whether each limitation is described in the specification, which Applicants believe to be the case, Applicants note that the fact that a limitation may lack descriptive support in a disclosure as originally filed does not necessarily mean that the limitation is also not enabled. See MPEP 2164 and *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563, 19 USPQ 2d 1111, 1116-17 (Fed. Cir. 1991).

Furthermore, Applicants submit that the specification teaches the manner and process of using the claimed invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented and thus must be taken as being in compliance with the enablement requirement. Thus, the present specification is enabling with respect to claims 1-20 and therefore the 35 U.S.C. 112 rejection has been overcome. Applicants submit that, as a result, claims 1-20 are in a condition for allowance at least with respect to the 35 U.S.C. 112 rejection stated above.

In addition, Applicants submit that for the above and below stated reasons that the 35 U.S.C. 112 rejection was unsubstantiated. The Examiner has

not provided any reason to doubt the objective truth of the statements contained within the specification. The Examiner has also not provided any specific technical reasons as required to support a *prima facie* case of lack of enablement. *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367,370 (CCPA 1971). The Office Action does not provide any facts, reasons, or evidence that lead the Examiner to conclude that the specification fails to teach how to make and use the claimed invention without undue experimentation, or that the scope of any enablement provided to one skilled in the art is not commensurate with the scope of protection sought by the claims. Simply stating that the specification fails to disclose how the parts are combined to create the system is insufficient reasoning, does not provide any evidence, and from the above and previously stated is clearly unsubstantiated.

The Office Action states that Applicants chose not to discuss the rejection or to seek further clarification even though the Examiner offered to have an interview with Applicants' representative. Applicants submit that it is true that the Examiner offered to have an interview. However, Applicants submit that it is not true that the Applicants chose not to seek further clarification. Applicants' representative specifically requested further clarification from the Examiner, but the Examiner was unable to provide that clarification and only stated that the Applicants' representative may state in an interview where the enablement for each claim is provided in the specification. Applicants know where the enablement is provided in being a critical and influential part of the drafting of the stated application and have provided where such enablement is disclosed in the application in the previous and current Responses. Applicants chose not to have an interview because the Examiner stated that he was unable to provide any further understanding with regards to why he felt that the specification lacked enablement. Thus, Applicants felt the interview would not be productive in this regard and that a written explanation by the Applicants would provide a

better and more accurate record for the reasons why enablement is clearly provided.

Claim 11 stands rejected under 35 U.S.C. 112, second paragraph, as being indefinite. With respect to claim 11, Applicants have submitted that no amendment is necessary. The term "very small aperture" is part of the term "very small aperture terminal", which has a specific identification and meaning in the art. A very small aperture terminal or VSAT refers to an earthbound station used in satellite communications of data, voice and video signals, excluding broadcast television. A VSAT is the communication medium that allows public or private institutions to send and /or receive information from their own 'Personal Earth Station." A VSAT does not refer to any type of screen not used with a desktop computer, as suggested in the Office Action. A VSAT consists of two parts, a transceiver that is placed outdoors in direct line of sight to a satellite and a device that is placed indoors to interface the transceiver with the end user's communications device, such as a personal computer. Although the term "very small" in and of itself may be indefinite in the abstract, the term "very small aperture terminal" is definite and refers to an earthbound station as described above.

The Office Action states that the features upon which Applicants rely (i.e., VSAT) are not recited in the rejected claims. Applicants submit that Applicants assume that this statement is with regards to claim 11 only, since claim 11 is the only claim that recites a "very small aperture terminal." Applicants also submit that VSAT is the acronym for very small aperture terminal. Thus, claim 11 specifically recites the feature VSAT stated in the Office Action. Also, hypothetically, if the Examiner is referring to the specific features of a VSAT, such as that a VSAT is an earthbound station used in satellite communications of data, voice, and video signals, such recitation is not necessary and would be at least partially redundant. Applicants note that a claim term must be given its

"plain meaning" unless it is defined in the specification. See MPEP 2111.01 and *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). Also, in the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meaning attributed to them by those skilled in the art. See *Sunrace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1302, 67 USPQ 2d 1438, 1441, (Fed. Cir. 2003). The specification of the present application does not provide a clear definition for the term very small aperture terminal, thus the plain, ordinary, and customary meaning ought to be used. Applicants have previously and above provided the plain and ordinary meaning of the term very small aperture terminal (VSAT).

In addition, the Applicants submit that the plain and ordinary meaning provided by the Applicants or that, which is similar thereto, are the only meanings that can be used. The definition utilized in interpreting claim terms must be most consistent with Applicants' use of the terms. See *Brookhill-Wilk I*, 334 F. 3d at 1300, 67 USPQ 2d, at 1137 (Fed. Cir. 2003). The Examiner interprets the term very small aperture terminal to mean a terminal having a small screen or the like, which is clearly an improper and inconsistent meaning. In stating such the Examiner is interpreting the term "aperture" to mean "screen." An aperture refers to a circular emitter, such as that of an antenna, or may refer to an opening, such as an opening of a lens. Since the term aperture is used to describe the term terminal the definition of an opening would be inconsistent, thus a circular emitter, such as that of an antenna is the meaning that ought to be used and is consistent with a VSAT. A screen is defined as a display upon which pictures may be projected. A screen is typically in the form of a monitor. The terms aperture and screen clearly have different definitions and are not the same.

The Applicants are unable to find any definition with regards to the term very small aperture terminal (VSAT) that is different or inconsistent with that provided by the Applicants above. Applicants submit that to use any other

definition would not one that would be attributed to the stated term by one skilled in the art. The term very small aperture terminal has a very specific meaning to one skilled in the art, thus to one skilled in the art of telecommunications, and to refer to it as a small monitor would simply be improper.

Claims 1-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Boys (U.S. Pub. No. 2002/0059373 A1) in view of Atkinson (U.S. Pub. No. 2001/0039571 A1).

On page 14, the Office Action states that one cannot show obviousness by attacking references individually where the rejections are based on combination of references. Applicants agree. For this reason Applicants in the previous Response not only argued why the limitations were not disclosed by the references individually, but also why the combination of the references did not teach or suggest each and every limitation claimed. The Examiner in the first Office Action stated that certain limitations were disclosed by specific references. Applicants provided arguments as to why this is simply not true and then in addition stated why the combination of the references would not deem the claimed invention obvious. Applicants have herein provided additional arguments why Boys and Atkinson alone or in combination fail to teach or suggest each and every limitation of each of the claims.

On page 14, the Office Action also states (as understood by the Applicants) that since the claimed features that the Applicants have shown are not disclosed or taught by the references are contained within the independent claims, therefore the references also apply to all of the dependent claims. Applicants are unsure what is meant by this statement. Applicants submit that regardless of whether the limitations of the independent claims are shown not to be disclosed or taught by the references, should the references apply to the independent claims, of course they then would apply to the dependent claims.

Applicants submit, for argument sake, should the references apply to the independent claims and thus the dependent claims, that does not imply in any way that the references teach or suggest each and every element of the dependent claims. Although references may teach or suggest each and every element of an independent claim, one cannot infer that the references teach or suggest each and every element of the dependent claims.

As stated in the previous Response, Boys discloses an Internet enabled subscription teaching service system. The system includes multiple lecture recipients 15 and a lecture service provider 17, which are connected to an ISP 20. The ISP 20 is in communication with multiple servers 19, 27, and 29 via an Internet. The servers 19, 27, and 29 are used to store information and contain HTML information.

With respect to claim 1, the Office Action states that Boys teaches a presentation server that modifies the communication signals by performing presenter chosen tasks via the presenter software interface. Applicants traverse, and submit that Boys does not teach a presentation server that modifies communication signals or a presentation server that performs the stated modification via a presenter software interface. In Boys, a lecturer invokes software 35 within the lecture service provider or personal computer 17 to create a lecture. The lecture service provider 17 is not a presentation server. A server allows for the connection of multiple computers for example via an Intranet at a host site. The lecture service provider 17 is simply a personal computer that is in communication with a server that is remotely located. The lecture is bundled using the software 35 and then sent to the Internet server 19. The server 19 stores the lecture and delivers the lecture at the appropriate time to the recipients 15. The delivery of the lecture is coordinated by another software 31 located within the server 19. The server 19 does no modify the lecture, but rather simply delivers it to the recipients 15. Also, the server 19 does not perform any task via

the lecture service provider 17. Tasks performed by the server 19 are coordinated by the software 31 not by the lecture service provider 17 or the software 35.

Although Boys clearly fails to disclose the limitations of a presentation server that performs the stated tasks, claim 1 is herein amended to further distinguish over Boys. Claim 1 is amended to include the limitation of a host site having the presentation software interface and the presentation server. In Boys the lecture service provider 17 does not contain a presentation server, but rather communicates with the Internet server 19. The lecture service provider 17 and the server 19 are separately located; this is unlike the presentation server and the presentation software interface of the present application. Also, claim 1 recites the limitation of the presentation server being separate from said presenter software interface. Although the lecture service provider 17 is separate from the Internet server 19, they are not both part of a host site.

The Office Action further states that Boys teaches two or more client adaptors converting communication signals between said host compatible software language and two or more heterogeneous client type software languages. Applicants traverse. The Office Action admits that Boys fails to teach two or more heterogeneous client types. Applicants agree, and submit that since the later is not taught by Boys that clearly the former is also not taught by Boys. Since Boys fails to teach or suggest heterogeneous client types, Boys does not teach or suggest adaptors or any other device that converts communication signals between a host compatible software language and multiple heterogeneous client type software languages.

The Office Action also states that Boys teaches the directing of communication signals between said presenter software interface and said two or more heterogeneous client types via one or more Internet protocols. Applicants again traverse.

Applicants submit that since Boys admittedly fails to teach or suggest heterogeneous client types, Boys also fails to teach or suggest communication therewith and the associated devices necessary, such as the claimed Internet data adaptors, to perform communication therewith. The Office Action states that such an Internet data adaptor is inherent. Applicants have states that the Internet data adaptors claimed allow communication signals to be transmitted to and received from heterogeneous client types, which often utilize different Internet protocols. Such an adaptor is not inherent, especially since the required use thereof is not necessary or required unless communication between an Internet and heterogeneous client types exists, which is not the case in Boys or Atkinson.

Atkinson, like Boys, also fails to disclose a host site having a presenter software interface and a presentation server, as claimed. Other than the disclosure of heterogeneous client types, Applicants are unable to find any of the stated devices of claim 1 in Atkinson. Atkinson is directed to the transmission of electronic commerce not to telecommunication instruction classes and thus fails to disclose a majority of the devices claimed.

With respect to claim 6, the Office Action states that Boys-Atkinson teach a presenter hardware interface for communicating with the heterogeneous client types. As stated above, neither Boys nor Atkinson teach or suggest such communication. Boys discloses communication between a presenter interface and a single client type. Atkinson merely discloses different heterogeneous client types. Heterogeneous client types are known and clearly do exist, but the communication therewith in an interactive learning environment was not known prior to the present application. The combination of the passive devices of Atkinson with the teaching system of Boys does not teach or suggest the communication claimed or the devices required to perform such communication.

Atkinson, like Boys, also fails to teach or suggest a communication transport providing communication, in the form of presenter communication signals, between a host site and multiple heterogeneous client types as claimed. See arguments presented above.

With respect to claim 17, Applicants submit that both Boys and Atkinson fail to teach or suggest a multi-directional communication connection as claimed. Amended claim 17 recites the limitations of receiving presenter communication signals and client communication signals from at least one heterogeneous client type on two or more heterogeneous client types. In review of the relied upon references one can clearly see that boys only discloses bi-directional communication between a lecture service provider 17 and a recipient, but does not teach or suggest communication signals being transferred between recipients or from a first recipient through a host site and to a second recipient. Atkinson also fails to teach or suggest such transfer of communication signals. Atkinson also only discloses communication between a media manager and an output device. Also, with respect to claim 17, the Office Action states on page 15 that Boys discloses wireless capability. Applicants traverse. Applicants submit that a wired connection to an Internet provider does not infer wireless capability.

Also, note that the only interaction provided in Atkinson is with a commerce center 295, which is not a host that provides programming, but rather is a place where orders are taken. Note also that the interaction of Atkinson is not performed using the Internet 252. Thus, Atkinson, like Boys, also fails to teach or suggest the bi-directional communication claimed between a host site and multiple heterogeneous client types, as claimed.

With respect to amended claim 20, neither Boys nor Atkinson teach or suggest the limitations of determining material received from clients to be displayed on each of a plurality of heterogeneous client types, converting the material between a host language and two or more heterogeneous client type

languages, and displaying the material on multiple learning media at multiple remote locations. Neither Boys nor Atkinson teach or suggest any of the stated limitations, see above. Thus, claim 20 is also novel, nonobvious, and is in a condition for allowance.

Referring to MPEP 2143.01, the mere fact that references can be combined or modified does not render the resultant obvious unless the prior art also suggests the desirability thereof, *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). There is no motivation provided in either reference for the combination and modification required thereof that would allow one to arrive at the claimed inventions, besides the combination thereof would not allow one to arrive at the invention claimed, since each and every element is not taught or suggested by either reference. Applicants submit that there is also no motivation to combine and modify the references as is necessary to arrive at the claimed invention.

The Office Action relies on paragraphs 5 and 6 of Atkinson and paragraph 19 of Boys for the motivation to combine. In paragraphs 5 and 6, Atkinson discloses media presentations taking place in a public space. This disclosure needs to be taken in view of Atkinson as a whole. Atkinson is directed to electronic commerce not to an interactive instruction network. As stated above, the only interaction in Atkinson is between clients and a commerce center. The purpose of the interaction with the commerce center is for the selecting of commerce media to be viewed and for the ordering of goods. There is no interaction with the original programming site or host site, there is no interaction over an Internet, and clearly there is no interaction with an instruction network presenter. Paragraph 19 of Boys states that lecture programs may be available to PC's or other Internet-capable equipment connected to the Internet network. The connection of other Internet-capable equipment does not provide the necessary motivation to combine and modify Boys and Atkinson. This connection does not

imply the use of heterogeneous client types, and for argument sake even if it did provide such implification, it does not provide the modification necessary to arrive at the present invention.

The Office Action states that hindsight reasoning is proper so long as it takes into account only knowledge which was within the level of ordinary skill at the time of the claimed invention was made and does not include knowledge gleaned only from the Applicants' disclosure. Applicants believe that to arrive at a conclusion of obviousness can only be made through the gleaning of knowledge from Applicants' disclosure. It is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based. Zurko, 258 F.3d at 1386, 59USPQ2d at 1697 (Fed. Cir. 2001). The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amendable to the taking of such notice. *In re Eynde*, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973). Ordinarily, there must be some form of evidence in the record to support an assertion of common knowledge. General conclusions concerning what is "basic knowledge" or "common sense" to one of ordinary skill in the art without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection. *Lee*, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002). The Examiner must provide specific technical and scientific reasoning to support his or her conclusion of common knowledge. *In re Soli*, 317 F.2d at 946, 37 USPQ at 801 (CCPA 1963). Applicant submits that no specific factual findings or concrete evidence has been put forth nor has any specific technical reasoning been put forth to support the assertion of common knowledge.

Thus, Applicants submit that Boys and Atkinson alone or in combination fail to teach or suggest a majority of the limitations recited in claim 1. Referring to MPEP 706.02(j) and 2143, to establish a *prima facie* case of obviousness the prior

art reference(s) must teach or suggest all the claim limitations, see *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Therefore, since the relied upon art fails to teach or suggest each and every limitation of claims 1, 6, 17, and 20, claims 1, 6, 17, and 20 are novel, nonobvious, and are in a condition for allowance. Also, since claims 2-5, 7-16, and 18-19 depend from claims 1, 6, and 17, respectively, they too are novel, nonobvious, and are in a condition for allowance for at least the same reasons.

The Office Action states that Applicants' amendment is not persuasive and thus the application is made Final. Referring to MPEP 706.07, Applicants, respectfully, submit that this action has been improperly been made Final. Applicants agree that under present practice a second or subsequent action may be made Final. However, Applicants' amendment did not necessitate the above 35 U.S.C. 112 rejections, since the specification is clearly enabling. Also, the references clearly fail to teach or suggest each and every limitation of the claims as previously presented and especially as herein amended. In addition, present practice does not sanction hasty or ill-considered final rejections. The Applicants have merely seeked to define the patent protection to which they are justly entitled. The Applicants have previously and clearly amended the claims such that the claimed invention is not taught or suggested by the prior art, and in so doing they deserve the cooperation of the Examiner and should not be prematurely cut off in the prosecution. The Applicants have responded promptly and have not resorted to technical or obvious subterfuges. Although the claims have been and are in allowable form, should the Examiner deem a further search is necessary, the application should be made non-final and the issuance of an Advisory Action should be deemed inappropriate at this time.

In light of the amendments and remarks, Applicants submit that all objections and rejections are now overcome. The Applicants have added no new matter to the application by these amendments. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, he is respectfully requested to contact the undersigned attorney.

Respectfully submitted,

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